

CLAIMS

1. Method for weaving pile fabrics on a face-to-face weaving machine, where, in successive insertion cycles,
5 weft yarns (1-12) are inserted between binding warp yarns (13-16) and pile warp yarns (17-24), so that two backing fabrics (30), (31) are woven one above the another, in which groups of at least four weft yarns (1-6); (7-12) are inserted in respective openings
10 between repeatedly crossing binding warp yarns (13), (14); (15), (16), and so that pile warp yarns (18), (21), (24) are interlaced over a weft yarn (2), (5), (8), (11) in the upper (30) and lower backing fabric (31) alternately in order to form pile burls,
15 characterized in that during the successive insertion cycles each time at least two weft yarns (1,11,12), (2,3,7), (4,8,9), (5,6,10) are inserted, so that each group of weft yarns (1-6); (7-12) comprises at least two pairs of weft yarns (2,3), (5,6), (8,9),
20 (11,12), being inserted one above the other and in that the pile warp yarns (18), (21), (24) are interlaced each time over the weft yarns (2), (5), (8), (11) of these pairs, situated on the back.
- 25 2. Method according to any one of the preceding claims, characterized in that during the successive insertion cycles a pair of weft yarns (2,3), (5,6) is inserted for the upper backing fabric (30) and a pair of weft yarns (8,9), (11,12) for the lower backing fabric (31).
- 30 3. Method according to the claims 1 or 2, characterized in that the pile warp yarns (18), (21), (24) forming pile are made to form pile burls according to a two-shot

weave.

4. Method according to any one of the preceding claims, characterized in that in each backing fabric (30), (31) co-operating binding warp yarns (13), (14); (15), (16) are provided, which are crossing one another each time after at least four successive insertion cycles.
5. Method according to any one of the preceding claims, characterized in that in at least one backing fabric (30), (31) pile warp yarns (17-24) forming no pile are woven in, and in that the two weft yarns of each pair of weft yarns (2,3), (5,6), (8,9), (11,12) are provided on the back and on the pile face of these pile warp yarns (17-24) forming no pile respectively.
6. Method according to any one of the preceding claims, characterized in that in at least one backing fabric (30), (31) tension warp yarns (25), (26) are provided and pile warp yarns (17-24) forming no pile are woven in, and in that the two weft yarns of each pair of weft yarns (2,3), (5,6), (8,9), (11,12) are provided on the back and on the pile face of these pile warp yarns (17-24) forming no pile.
7. Method according to any one of the preceding claims, characterized in that during the successive insertion cycles each time three weft yarns (1,11,12), (2,3,7), (4,8,9), (5,6,10), (1,11,12) are inserted and in that two of them (2,3), (8,9), (5,6), (11,12) are inserted in the upper (30) and in the lower backing fabric (31) alternately, whereas each time the third weft yarn (7), (4), (10), (1) is inserted in the other backing

fabric.

8. Method according to any one of the claims 1 through 6, characterized in that during a number of insertion cycles two weft yarns (2,3),(11,12) are inserted, and in that during a number of other insertion cycles three weft yarns (4,8,9),(5,6,10) are inserted, two of which weft yarns (8,9),(5,6) are inserted in the one backing fabric whereas the third weft yarn (4),(10) is inserted in the other backing fabric, so that each group of weft yarns (1-6),(7-12) also comprises at least one third weft yarn (1),(4),(7),(10).
9. Method according to any one of the preceding claims, characterized in that the weaving machine comprises weft insertion means, which are provided to insert three weft yarns (1,11,12),(2,3,7),(4,8,9),(5,6,10),(1,11,12) per insertion cycle, and in that during the insertion cycle in which two warp yarns (2,3),(8,9),(5,6),(11,12) are inserted, either one weft insertion means is disconnected, or no weft yarn is presented to one of the weft insertion means.
10. Method according to any one of the claims 7 through 9, characterized in that in at least one backing fabric (30),(31) pile warp yarns (17-24) forming no pile are woven in, and in that the said third weft yarns (7),(4),(10),(1) are provided on the back of these interlaced pile warp yarns.
11. Method according to any one of the claims 7 through 10, characterized in that in at least one backing fabric (30),(31) a number of tension warp yarns (25),(26) are

provided, and in that the said third tension warp yarns (7), (4), (10), (1) are provided between the tension warp yarns (25), (26) on the one hand and the woven in pile warp yarns (17-24) forming no pile on the other hand.

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12. Method according to any one of the preceding claims, characterized in that pile warp yarns (17-24) forming no pile, distributed among the two backing fabrics, are woven in in these backing fabrics.

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13. Method according to any one of the preceding claims, characterized in that in each group of weft yarns (1-6), (7-12) two pairs of weft yarns (2,3), (5,6), (8,9), (11,12), inserted above one another, are provided, and in that the pile warp yarns (18), (21), (24) are interlaced according to a two-shot weave round the weft yarns (2), (5), (8), (11), situated on the back, of each pair.

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14. Pile fabric comprising a backing fabric (30), (31) in which groups of weft yarns (1-6), (7-12) are inserted in respective openings between repeatedly crossing binding warp yarns (13), (14); (15), (16) and pile burls interlaced over a weft yarn (2), (5); (8), (11), characterized in that each group of weft yarns (1-6), (7-12) comprises at least two pairs of weft yarns (2,3), (5,6); (8,9), (11,12) inserted one above the other, and in that the pile burls are interlaced over the weft yarns (2), (5); (8), (11) situated on the back, of these pairs.

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15. Pile fabric according to claim 14, characterized in that pile warp yarns (17-24) forming no pile are woven

in in the backing fabric (30), (31), and in that the two weft yarns of each pair of weft yarns (2,3), (5,6); (8,9), (11,12) are provided on the back and on the pile face of these pile warp yarns (17-24) forming no pile.

16. Pile fabric according to claim 14 or 15, characterized in that tension warp yarns (25), (26) are provided and in that pile warp yarns (17-24) forming no pile are woven in in the backing fabric (30), (31), and in that the two weft yarns of each pair of weft yarns (2,3), (5,6); (8,9), (11,12) are running on the back and on the pile face of these tension warp yarns (25), (26) and pile warp yarns (17-24) forming no pile respectively.
17. Pile fabric according to any one of the claims 14 through 16, characterized in that two weft yarns (2,3), (5,6); (8,9), (11,12) inserted above one another and one weft yarn (1), (4); (7), (10) inserted separately are inserted alternately in the backing fabric (30), (31).
18. Pile fabric according to any one of the claims 14 through 17, characterized in that each group of weft yarns (1-6), (7-12) comprises two pairs of weft yarns (2,3), (5,6); (8,9), (11,12) inserted above one another and one weft yarn (1), (4); (7), (10) inserted separately.
19. Pile fabric according to any one of the claims 14 through 18, characterized in that each group of weft yarns comprises two pairs of weft yarns (1-6), (7-12) inserted above one another and two weft yarns

(1), (4); (7), (10) inserted separately.

20. Pile fabric according to any one of the claims 14 through 19, characterized in that in each group of weft yarns (1-6), (7-12) the number of weft yarns (1), (4), (7), (10) inserted separately is less than the number of pairs of weft yarns (1-6), (7-12) inserted above one another.
21. Pile fabric according to any one of the claims 14 through 20, characterized in that pile warp yarns (17-24) forming no pile are woven in in the backing fabric, and in that the said weft yarns (1), (4); (7), (10) inserted separately are provided on the back of these woven in pile warp yarns (17-24).
22. Pile fabric according to any one of the claims 14 through 21, characterized in that a number of tension warp yarns (25), (26) are provided and pile warp yarns (17-24) forming no pile are woven in in the backing fabric, and in that the said weft yarns (1), (4); (7), (10) inserted separately are provided between the tension warp yarns (25), (26) on the one hand and the pile warp yarns (17-24) forming no pile on the other hand.
23. Pile fabric according to any one of the preceding claims, characterized in that pile burls are interlaced over the weft yarns (2), (5); (8), (11) of each pair of weft yarns (2,3), (5,6); (8,9), (11,12) situated on the back.